

SEQUENCE LISTING

<110> COUNTER, CHRISTOPHER M.
ARMBRUSTER, BLAINE N.

<120> TELOMERE ELONGATION

<130> 1579-1047

<140> 10/554,295
<141> 2005-10-26

<150> PCT/US2004/013799
<151> 2004-04-30

<150> 60/466,427
<151> 2003-04-30

<160> 3

<170> PatentIn Ver. 2.1

<210> 1
<211> 5379
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 1
atggactaca aagacgtatca cgacaagtct ttggttccag caacaaatata tataatataca 60
ccccctgaatc aacttaaggg tggtaacatt gtcaatgtct atgggtttgtt gaagttcttt 120
aaggccccat atctaagcaa aggaactgat tattgcttcag ttgttaactat tgtggaccag 180
acaaatgtaa aactaacttg cctgctcttt agtggaaact atgaagccct tccaataatt 240
tataaaaatg gagatattgt tcgcgttacac aggctgaaga ttcaagtata taaaaaggag 300
actcagggttta tcaccagctc tggctttgca tctttgacgt ttgagggaaac tttgggagcc 360
cctatcatac ctcgcacttc aagcaagtat tttaacttca ctactgagga ccacaaaatg 420
gtagaaggct tacgttgg ggcattactt catatgtcac cgctttggac attactaaaa 480
tttgtgtatg ttcaagccaaat gcagtattttt gacctgactt gtcagcttctt gggcaagca 540
gaagtggacg gagcatcatt tcttctaaag gtatggatg gcaccaggac accatttcca 600
tcttggagag tcttaataaca agaccttggc tttgaaggatg atttaagtca catccatcg 660
ctacaaaatc tgacaataga catttttagtc tacgataacc atgttcatgt ggcaagatct 720
ctgaagggttgc aagctttct tagaatctat agccttcata ccaaacttca atcaatgaat 780
tcagagaatc agacaatgtt aagtttagag tttcatctt atggaggtac cagttacgg 840
cggggaaatca gggcttacc agaaagtaac tctgatgtgg atcaactgaa aaaggattta 900
gaatctgcaa atttgacagc caatcagcat tcagatgtt tctgtcaatc agaacctgac 960
gacagcttc caagctctgg atcagtatca ttatacgagg tagaaagatg tcaacagcta 1020
tctgctacaa tacttacaga tcatcagttat ttggagagga caccactatg tgccattttg 1080
aaacaaaaatc ctccctcaaca ataccgcattc cgagcaaat tgaggtcata taagcccaga 1140
agactatttc agtctgttaa acttcattgc cctaaatgtc atttgctgca agaaggttcca 1200
catgagggcg atttggatata aatttttcag gatggtcaa ctaaaacccc agatgtcaag 1260
ctacaaaata catcattata tgattcaaaa atctggacca ctaaaaatca aaaaggacga 1320
aaagtagcag ttcatgttgc gaaaaataat ggtatttcc cgctttcaaa tgaatgtcta 1380
cttttgatag aaggaggtac actcagtgaa atttgcaaac tctcgaacaa gtttaatagt 1440
gtaattccctg tgagatctgg ccacgaagac ctggaaacttt tgaccccttc agcaccattt 1500
cttatacaag gaacaataca tcactatggc tgtaaacagt gttctagttt gagatccata 1560

caaaaatctaa attccctggc tgataaaaaca tcgtggattc cttcttctgt ggcagaagca 1620
ctgggtattg tacccttcca atatgtttt gttatgacct ttacacttga tcatggaaaca 1680
ggagtagct aagcctatct catggattct gacaaattct tccagattcc agcatcagaa 1740
gttctgtatgg atgatgacct tcagaaaagt gtggatatga tcatggatat gtttgcct 1800
ccaggaataaa aattgtatgc atatccgtgg ttgaaatgct tcatcaagtc atacaatgtc 1860
acaaaatggaa cagataatca aatttgcata cagattttg acaccacagt tgcagaagat 1920
gtaatcgta ctaggaattc tagatctatg gactacaaag acgatgacga caagatgccg 1980
cgcgtccccc gctggcggc cgtgcgtcc ctgctgcga gccactaccg cgaggtgctg 2040
ccgctggcca cgttcgtgcg gcgcctgggg ccccagggtt ggcggctggc gcagcgcggg 2100
gaccggcggg cttccgcgc gctgggtggc cagtgccctgg tgcgtgcgc ctgggacgca 2160
cggccgcccc cccgcgcggc ctccctccgc caggtgtcct gcctgaagga gctgggtggcc 2220
cgagtgtgc agaggctgtg cgagcgcggc gcgaagaacg tgcgtggcctt cggcttcgcg 2280
ctgctggacg gggccgcgg gggccccccc gaggccctca ccaccacgcg ggcgcacgtac 2340
ctgcccaca cggtgaccga cgcactgcgg gggagcgggg cgtgggggct gctgctgcgc 2400
cgcgtggcgc acgacgtgct gttcacctg ctggcacgt gcgcgcctt tgcgtgggtg 2460
gctcccagct gcgccttacca ggtgtgcggg ccgcgcgtt accagctgg cgctgccact 2520
caggccggc cccgcacca cgctagttgaa cccgcacccg gtcgtggatg cgaacggggcc 2580
tggaaccata gcgtcaggga ggcgggggtc cccctggggc tgcgcggcc ggggtgcgagg 2640
aggcgccggg gcagtgcac ccgaagtctg ccgttgcacca agaggccca ggcgtggcgt 2700
gcccctgagc cggagcggac gcccgttggg caggggtctt gggcccaacc gggcaaggacg 2760
cgtggaccga gtgaccgtgg tttctgtgtg tgcacccctg ccagacccgc cgaagaagcc 2820
acctcttgg agggtgcgtc ctgcgtgcacg cgcacttccc acccatccgt gggccgcag 2880
caccacgcgg gccccccatc cacatgcggg ccaccacgtc cctgggacac gccttgcctt 2940
ccggtgtacg cggagaccaa gcacttcctc tactccctcgt gcgcacaagg gcaagctgcgg 3000
ccctccttcc tactcagctc tctgaggccc agcctgactg gcgcgcggag gctcgtggag 3060
accatcttc tgggttccag gccctggatg ccaggactc cccgcagggtt gccccccctg 3120
ccccagcgtc actggcaaat gcggccctgt tttctggagc tgcgtggaa ccacgcgcag 3180
tgcccctacg ggggtcttcc caagacgcac tgcgcgtgc gagctgcggt caccgcac 3240
gcccgtgtct gtgcgggggaa gaagcccaag ggctctgtgg cggcccccgg gggaggaggac 3300
acagacccccc gtgcgttgcgt gcaactgtc cgcacccctg gcaggtgtac 3360
ggcttcgtgc gggcctgcct gcgcggcgtt gtcgtggcc gctctgggg ctccaggcac 3420
aacgaacgccc gtcgttcgt gaaacaccaag aagttcatct ccctggggaa gcatgccaag 3480
ctctcgctc aggagctgac gtggaaatgt agcgtgcggg gctgcgttgc gtcgcgcagg 3540
agcccagggg ttggctgtgt tccggccgc gaggacgtc tgcgtgagga gatcctggcc 3600
aagttcttc actggctgtat gatgtgttgc gtcgtgcgtc tgcgtcagggtt tttctttat 3660
gtcacggaga ccacgtttca aaagaacagg ctcttttctt accggaaagag tgcgtggagc 3720
aagttcaaa gcattggaaat cagacagcac ttgaagaggg tgcgtgcgc ggagctgtcg 3780
gaagcagagg tcaggcagca tcgggaagcc aggcccggcc tgcgtgcgtc cagactccgc 3840
ttcatccccca agcctgacgg gtcgcggccg attgtgaaca tggactacgt cgtggagcc 3900
agaacgttcc gcagagaaaaa gaggggccgag cgtctcacct cgagggtgaa ggcactgttc 3960
agcgtgtca actacgcggc ggcgcggcgc cccggcctcc tggcgcctc tgcgtggggc 4020
ctggacgata tccacaggggc ctggcgcacc ttcgtgtgc gttgtgcgggg ccaggacccg 4080
ccgcctgagc tgcgtttgtt caaggtggat gtcgtggccg cgtacgcacac catccccccag 4140
gacaggctca cggaggctcat cgcgcacatc atcaaaaaaaa agaacaacgtt ctgcgtgcgt 4200
cggtatgccc tggtccagaa ggcgcggccat gggcacgtcc gcaaggccctt caagagccac 4260
gtctctaccc tgcacagaccc ccaagccgtac atgcacactt tgcgtggctca ctcgcaggag 4320
accagccgcg tgagggatgc cgtcgatcat gaggacgtt ctccttgc gtcgtggcc 4380
agtggctct tcgacgttcc ctcacgttcc atgtgcacc acggcgtgcg catcaggggc 4440
aagtcctacg tccagtgccca gggatcccg cagggtccca tcctctccac gtcgtctgc 4500
agcctgtgtc acggcgcacat ggagaacaaag ctgtttgcgg ggttgcggcc ggcacggctg 4560
ctcctgcgtt tggtggatga ttctttgttg tgcacaccc acctcaccac cgcgaaaacc 4620
ttcctcagga ccctggtcccg aggtgtccct gatgtggct gctgtggtaa cttgcggaaag 4680
acagtggta acttccctgt agaagacgag gcccgggtt gcacggctt tgcgtggatg 4740
ccggccacg gcctattccc ctggcgtggc ctgcgtgcgg atacccggac cctggaggtg 4800
cagagcgtact actccagta tgccggacc tccatcagag ccagtctcac cttcaaccgc 4860
ggcttcaagg ctgggagggaa catgcgtcgc aaactctttt gggcttgcg gtcgtggatg 4920
cacagcctgt ttctggatcc gcaaggtaac agcctccaga cggcgtgcac caacatctac 4980

aagatcctcc tgctgcaggc gtacaggttt cacgcattgtg tgctgcagct cccatttcat 5040
cagcaagttt ggaagaaccc cacattttc ctgcgcgtca tctctgacac ggcctccctc 5100
tgctactcca tcctgaaagc caagaacgca gggatgtcgc tggggggccaa gggcgccgccc 5160
ggccctctgc cctccgaggc cgtgcagtgg ctgtgccacc aagcattcct gctcaagctg 5220
actcgacacc gtgtcaccta cgtgccactc ctggggtcac tcaggacagc ccagacgcag 5280
ctgagtcgga agctcccccggg gacgacgctg actgccctgg aggccgcagc caaccggca 5340
ctgccctcag acttcaagac catcctggac tgagtcgac 5379

<210> 2
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Primer

<400> 2
cgggatccta cgtagcttagc atggactaca aagacgatga cgacaagtct ttggttccag 60
caacaaat 68

<210> 3
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Primer

<400> 3
cgacgtcgac taaatacgta cgattacatc ttctgcaact gtg 43